



**Commonwealth of Virginia
Department of Medical
Assistance Services**

External Quality Review

**Southern Health Services
(CareNet)**

SFY 2005

We don't provide healthcare... we make it better.



Section II - Performance Improvement Projects

Introduction

As part of the annual External Quality Review (EQR), Delmarva conducted a review of Performance Improvement Projects (PIPs) submitted by each MCO contracting with the Department of Medical Assistance Services (DMAS). According to its contract with DMAS, each MCO is required to conduct performance improvement projects that are designed to achieve, through ongoing measurements and intervention, significant improvement, sustained over time, in clinical care and non-clinical care areas that are expected to have a favorable effect on health outcomes and enrollee satisfaction. According to the contract, the performance improvement projects must include the measurement of performance using objective quality indicators, the implementation of system interventions to achieve improvement in quality, evaluation of the effectiveness of the interventions, and planning and initiation of activities for increasing or sustaining improvement.

The guidelines utilized for PIP review activities were CMS' *Validation of PIPs* protocols. After developing a crosswalk between the QIA form and *Validating PIP Worksheet*, Delmarva staff developed review processes and worksheets using CMS' protocols as guidelines (2002). CMS' *Validation of PIPs* assists EQROs in evaluating whether or not the PIP was designed, conducted, and reported in a sound manner and the degree of confidence a state agency could have in the reported results.

Prior to the PIP review for the 2003 review period (July through December 2003) training on the new validation requirements was provided to the Medallion II MCOs and Delmarva review staff. This training consisted of a four-hour program provided by Delmarva to orient the MCOs to the new BBA requirements and PIP validation protocols so that they would be familiar with the protocols used to evaluate their performance. CMS' validation protocols, *Conducting and Validating Performance Improvement Projects*, were presented to the MCOs in hardcopy during the training.

For the 2003 review period, the reviewers evaluated the entire project submission, although the minimum requirement was that each MCO review and analyze its baseline performance in 2003 to develop strong, self-sustaining interventions targeted to reach meaningful improvement.

For the current review period, calendar year (CY) 2004, the same protocols and tools were used. Reviewers evaluated each project submitted using the CMS validation tools. This included assessing each project across ten steps. These ten steps include:

- Step 1: Review the Selected Study Topics
- Step 2: Review the Study Questions
- Step 3: Review the Selected Study Indicator(s)
- Step 4: Review the Identified Study Population
- Step 5: Review Sampling Methods
- Step 6: Review the MCO's Data Collection Procedures
- Step 7: Assess the MCO's Improvement Strategies
- Step 8: Review Data Analysis and Interpretation of Study Results
- Step 9: Assess the Likelihood that Reported Improvement is Real Improvement, and
- Step 10: Assess Whether the MCO has Sustained its Documented Improvement.

As Delmarva staff conducted the review, each component within a standard (step) was rated as “yes,” “no,” or “N/A” (not applicable). Components were then rolled up to create a determination of “met,” “partially met,” “unmet,” or “not applicable” for each of the ten standards. Table 1 describes this scoring methodology.

Table 1. Rating Scale for Performance Improvement Project Validation Review

Rating	Rating Methodology
Met	All required components were present.
Partially Met	One but not all components were present.
Unmet	None of the required components were present.
Not Applicable	None of the required components are applicable.

Results

This section presents an overview of the findings of the Validation Review conducted for each PIP submitted by the MCO. Each MCO's PIP was reviewed against all 27 components contained within the ten standards.

Southern Health Services (CareNet) provided the ten activities assessed for each PIP are presented in Table 2 below.

Table 2. 2004 Performance Improvement Project Review for CareNet

Activity Number	Activity Description	Review Determination	
		Increase the Number of Members with Asthma to Receive Care According to the Guidelines	Increasing Adolescent Immunization Rates
1	Assess the Study Methodology	Met	Met
2	Review the Study Question(s)	Unmet	Partially Met
3	Review the Selected Study Indicator(s)	Partially Met	Partially Met
4	Review the Identified Study Population	Partially Met	Met
5	Review Sampling Methods	Met	Met
6	Review Data Collection Procedures	Partially Met	Partially Met
7	Assess Improvement Strategies	Partially Met	Met
8	Review Data Analysis and Interpretation of Study Results	Met	Met
9	Assess Whether Improvement is Real Improvement	Partially Met	N/A
10	Assess Sustained Improvement	Met	N/A

Conclusions and Recommendations

Conclusions

CareNet provided two PIPs for review. These included, (1) Increasing the Number of Members with Asthma to Receive Care According to the Guidelines, and (2) Increasing Adolescent Immunization Rates. These were evaluated using the Validating Performance Improvement Projects protocol, commissioned by the Department of Health and Human Services, Centers for Medicare and Medicaid Services, which allows assessment among 10 different project activities.

For the Asthma Project, the MCO received a review determination of “Met” for four (4) elements, “Partially Met” for five (5) elements, and “Unmet” for one (1) element..

For the second project, Adolescent Immunization Rates, CareNet received a review determination of “Met” for five (5) elements, “Partially Met” for three (3) elements. The remaining two elements were not applicable for this review cycle.

Recommendations

Based on a review of each of the two PIPs provided by the MCO, the following recommendations are made to improve the PIP process and performance:

- Develop and submit clear problem statements and/or study questions for all PIPs.
- Ensure that numerators and denominators support all identified indicators.
- Describe all enrollment criteria to clearly define the indicators
- Ensure that all data sources are specified for each indicator.
- Include a description of the internal plan to ensure the collection of valid and reliable data for each indicator.
- Describe a prospective data analysis plan for each indicator.
- Describe the qualifications of staff and personnel used to collect the data for each project.
- Consider undertaking a more aggressive/improved barrier analysis to assist in focusing interventions.
- Assure that interventions are timely.

QUALITY IMPROVEMENT PROJECT VALIDATION WORKSHEET

Use this or a similar worksheet as a guide when validating MCO/PHP Quality Improvement Projects. Answer all questions for each activity. Refer to the protocol for detailed information on each area.

ID of evaluator jaaDate of evaluation: July 2005

Demographic Information	
MCO/PHP Name or ID:	Southern Health Services/CareNet
Project Leader Name:	Jennifer Palmese, Operations Manager
Telephone Number:	804-527-7040
Email:	jypalmese@cvty.com
Name of Quality Improvement Project:	Increasing the Number of Members with Asthma to Receive Care According to the Guidelines
Dates in Study Period:	January 1, 1999 to December 31, 2004
Phase:	Remeasurement 5

I. ACTIVITY 1: ASSESS THE STUDY METHODOLOGY					
Step 1. REVIEW THE SELECTED STUDY TOPIC (S)					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
1.1 Was the topic selected through data collection and analysis of comprehensive aspects of enrollee needs, care and services?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Southern Health Services/CareNet (CareNet) submitted internal Medicaid - specific data to justify the choice of the study topic. Asthma has consistently ranked in the top 25 diagnoses for inpatient and ambulatory services. CareNet utilization data revealed that approximately 6% of enrollees diagnosed with asthma had an emergency room (ER) visit in 1998. As noted in the 2003 review this report should describe more recent data analyzed to justify the choice of the topic and focus area.	QAPI RE2Q1 QAPI RE2Q2,3,4 QIA S1A1
1.2 Did the MCO/PHP QIP address a broad spectrum of key aspects of enrollee care and services?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This PIP seeks to decrease ER and hospital admissions for Medallion II enrollees who have been diagnosed with asthma. The PIP also includes a goal to increase flu vaccinations to enrollees with a diagnosis of asthma. This PIP, over time, did address multiple care and delivery systems that have the ability to pose barriers to improved enrollee outcomes and meets the requirements of this element.	QAPI RE2Q1 QIA S1A2
1.3 Did the MCO/PHP QIP include all enrolled populations; i.e., did not exclude certain enrollees such as with those with special health care needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Southern Health chose to include all CareNet members identified as asthmatic via ICD9 code 493. No exclusions were noted.	QAPI RE2Q1 QIA S1A2

I. ACTIVITY 1: ASSESS THE STUDY METHODOLOGY
Step 1. REVIEW THE SELECTED STUDY TOPIC (S)
Assessment Component 1 <input checked="" type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.
Recommendations Describe more recent data analyzed to justify the choice of the topic and focus area.

Step 2: REVIEW THE STUDY QUESTION (S)					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
2.1 Was there a clear problem statement that described the rationale for the study?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PIP documentation did not state a specific problem or study question relating to the Medallion II population.	QIA S1A3
Assessment Component 2 <input type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – Some, but not all components are present. <input checked="" type="checkbox"/> Unmet -None of the required components is present.					
Recommendations Submit a clear problem statement or study question that identifies why CareNet decided to focus on this project as a meaningful activity for the Medallion II population enrolled in 2004.					

Step 3: REVIEW SELECTED STUDY INDICATOR (S)					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
3.1 Did the study use objective, clearly defined, measurable indicators?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Three indicators were identified for this study: percent of eligible members who had an influenza vaccination, percent of eligible members who had an acute hospital admission, and percent of eligible members who had an acute ER visit. ICD 9 code (493) was used to identify enrollees with a diagnosis of asthma and CPT 9 codes were listed for service utilization. Eligible age parameters are birth to 64 and a small population age 65 and above who are eligible CareNet enrollees. Enrollment criteria was not specified which is a component of a clearly defined and measurable indicator.	QAPI RE3Q1, QAPI RE3Q2-6 QAPI RE3Q7-8 QIA S1B2 QIA S1B3
3.2 Did the indicators measure changes in health status, functional status, or enrollee satisfaction, or processes of care with strong associations with improved outcomes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The acute hospital admission and acute ER visit indicators clearly measure changes in health status. The influenza vaccination has been demonstrated to have a strong association with improved health outcomes.	QAPI RE3Q9 QIA S1B1
Assessment Component 3 <input type="checkbox"/> Met – All required components are present. <input checked="" type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components are present.					
Recommendations Describe enrollment criteria to clearly define the indicators.					

Step 4: REVIEW THE IDENTIFIED STUDY POPULATION					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
4.1 Did the MCO/PHP clearly define all Medicaid enrollees to whom the study question(s) and indicator(s) are relevant?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CareNet defined all Medicaid enrollees for all three indicators as enrollees identified as asthmatics in the measurement year based upon ICD 9 code 493.	QAPI RE2Q1, QAPI RE3Q2-6
4.2 If the MCO/PHP studied the entire population, did its data collection approach capture all enrollees to whom the study question applied?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There was no information provided to support the existence of procedures to ensure that CareNet's data collection approach captured all Medicaid enrollees for any of the three indicators.	QAPI RE4Q1&2 QAPI RE5Q1.2 QIA I B, C
Assessment Component 4 <input type="checkbox"/> Met – All required components are present. <input checked="" type="checkbox"/> Partially Met – One, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations Describe how CareNet ensures that their data collection approach validly captures all Medicaid enrollees for each of the indicators.					

Step 5: REVIEW SAMPLING METHODS					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
5.1 Did the sampling technique consider and specify the true (or estimated) frequency of occurrence of the event, the confidence interval to be used, and the margin of error that will be acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No sampling was used. CareNet stated that they included the entire eligible population in the PIP.	QAPI RE5Q1.3a QIA S1C2
5.2 Did the MCO/PHP employ valid sampling techniques that protected against bias? <i>Specify the type of sampling or census used:</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No sampling was used. CareNet stated that they included the entire eligible population in the PIP.	QAPI RE5Q1.3b-c QIA S1C2
5.3 Did the sample contain a sufficient number of enrollees?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	No sampling was used. CareNet stated that they included the entire eligible population in the PIP.	QAPI RE5Q1.3b-c QIA S1C2
Assessment Component 5 <input checked="" type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations 					

Step 6: REVIEW DATA COLLECTION PROCEDURES					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
6.1 Did the study design clearly specify the data to be collected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Data to be collected was identified to include ICD-9 diagnostic codes for asthma and specific CPT codes.	QAPI RE4Q1&2
6.2 Did the study design clearly specify the sources of data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sources of data were identified to include claims/encounter data. Pharmacy data was not identified as a source; however, it was identified under data collection methodology.	QAPI RE4Q1&2
6.3 Did the study design specify a systematic method of collecting valid and reliable data that represents the entire population to which the study's indicator(s) apply?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The data collection methodology was listed as a programmed pull from claims/encounter files of all eligible members as well as pharmacy data. It is unclear whether pharmacy data will be collected manually or through an automated system. The data collection cycle was identified as once a year. There was no indication of the degree of completeness for automated data. There was no evidence of a plan to audit data to ensure validity and reliability for any indicator. Errors in numerator data for 2002 and 2003 support a need for such a plan.	QAPI RE4Q3a QAPI RE4Q3b QIA S1C1 QIA S1C3
6.4 Did the instruments for data collection provide for consistent, accurate data collection over the time periods studied?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There was no evidence to support clear data collection instruments designed to promote inter-rater reliability for any manual data collection.	QAPI RE4Q1&2 QAPI RE4Q3b QAPI RE7Q1&2
6.5 Did the study design prospectively specify a data analysis plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	A prospective data analysis plan was not fully described, other than to state the frequency of the data analysis cycle.	QAPI RE5Q1.2
6.6 Were qualified staff and personnel used to collect the data?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The PIP did not specify the qualifications of staff/personnel used to collect the data.	QAPI RE4Q4

Step 6: REVIEW DATA COLLECTION PROCEDURES**Assessment Component 6**

- ☐ Met – All required components are present.
- ☒ Partially Met – Some, but not all components are present.
- ☐ Unmet -None of the required components is present.

Recommendations

Ensure that all data sources are accurately identified for each indicator. Describe the specific audit plan to ensure the collection of valid and reliable data for each indicator. Describe the degree of completeness of the automated data used for each study indicator. If manual data collection is performed for any indicator, describe how the data collection instrument was designed to promote inter-rater reliability. Develop a prospective data analysis plan that includes specific qualitative or quantitative data to be collected, use of population or sample data and basis for comparison, including not only baseline but prior period performance, current goal and benchmark, if applicable. Describe qualifications of staff/personnel used to collect the data.

Step 7: ASSESS IMPROVEMENT STRATEGIES					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
7.1 Were reasonable interventions undertaken to address causes/barriers identified through data analysis and QI processes undertaken?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CareNet performed barrier analysis following the 2004 measurement period and developed related interventions for each enrollee, provider, and administrative barrier identified as has been done following each remeasurement. Interventions have focused primarily on enrollee and provider education, however, in 2004 identification and outreach to non-compliant enrollees was implemented as well as targeted case management services for identified high-risk enrollees. Based upon the continued deterioration in rates for acute hospital admissions and an acute ER visit rate nearly twice the baseline rate it appears that the barrier analysis for these two indicators has been inadequate in identifying effective interventions to address opportunities for improvement.	QAPI RE6Q1a QAPI RE6Q1b QAPI RE1SQ1-3 QIA S3.5 QIA S4.1 QIA S4.2 QIA S4.3
Assessment Component 7 <input type="checkbox"/> Met – All required components are present. <input checked="" type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations Considerable deterioration in rates for acute hospital admissions and emergency room visits from baseline suggests the need for improved barrier analysis and more aggressive, focused, and timely interventions.					

Step 8: REVIEW DATA ANALYSIS AND INTERPRETATION OF STUDY RESULTS					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
8.1 Was an analysis of the findings performed according to the data analysis plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CareNet analyzed its findings after each remeasurement period. Both a quantitative and qualitative analysis was performed.	QAPI RE4Q4 QIA III
8.2 Did the MCO/PHP present numerical QIP results and findings accurately and clearly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Data/Results Table accurately and clearly identified the rate and MCO goal for each indicator for each measurement period. For MY 2002 and 2003 the numerator for all indicators and associated rates were corrected based upon identification of a transcriptional error.	
8.3 Did the analysis identify: initial and repeat measurements, statistical significance, factors that influence comparability of initial and repeat measurements, and factors that threaten internal and external validity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The analysis of results for the three indicators compared the fifth remeasurement with past performance. Analysis addressed any findings that were statistically significant. No factors were cited that threatened internal and external validity or influenced the comparability of initial and repeat measurements of administrative data.	QAPI RE7Q2 QIA S1C4 QIA S2.1
8.4 Did the analysis of study data include an interpretation of the extent to which its QIP was successful and follow-up activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The analysis included an assessment of the success of each indicator relative to past performance. Graphs were included to illustrate the six-year PIP trend for each indicator. The qualitative analysis section addressed opportunities and interventions for each barrier identified.	QIA S2.2

Step 8: REVIEW DATA ANALYSIS AND INTERPRETATION OF STUDY RESULTS**Assessment Component 8**

- ☒ Met – All required components are present.
- ☐ Partially Met – Some, but not all components are present.
- ☐ Unmet -None of the required components is present.

Recommendations

The quantitative analysis could be strengthened by comparing current rates with the prior period and baseline rates as well as established goal for each indicator.

Step 9: ASSESS WHETHER IMPROVEMENT IS REAL IMPROVEMENT					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
9.1 Was the same methodology as the baseline measurement used when measurement was repeated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There were no changes to baseline methodology identified.	QAPI RE7Q2 QAPI 2SQ1-2 QIA S1C4 QIA S2.2 QIA S3.1 QIA S3.3 QIA S3.4
9.2 Was there any documented quantitative improvement in processes or outcomes of care?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Improvement from baseline to remeasurement 5 was evident for the influenza vaccination rate, which was measured at 2% at baseline and at 31.26% at remeasurement 5. For the remaining indicators, acute hospital admissions and emergency room visits, the rates for each measurement period have consistently exceeded the baseline rate.	QAPI RE7Q3 QIA S2.3
9.3 Does the reported improvement in performance have face validity; i.e., does the improvement in performance appear to be the result of the planned quality improvement intervention?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Improvement in the influenza vaccination rate appears to have face validity based upon the interventions that were developed to address identified opportunities for improvement.	QIA S3.2
9.4 Is there any statistical evidence that any observed performance improvement is true improvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There were no statistical tests performed from baseline or remeasurement 4 to remeasurement 5 as had been done for prior measurements.	QIA S2.3

Step 9: ASSESS WHETHER IMPROVEMENT IS REAL IMPROVEMENT**Assessment Component 9**

- ☐ Met – All required components are present.
- ☒ Partially Met – Some, but not all components are present.
- ☐ Unmet -None of the required components is present.

Recommendations

Through repeated measurements of the study indicators selected for the project, meaningful change in performance relative to the performance observed during baseline measurement must be demonstrated for all indicators. Deterioration in rates for acute hospital admissions and emergency room visits from baseline suggests the need for improved barrier analysis and more aggressive, focused, and timely interventions. Consider performing tests of statistical significance for each indicator for each measurement period as appropriate to determine if observed performance improvement is true improvement.

Step 10: ASSESS SUSTAINED IMPROVEMENT					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
10.1 Was sustained improvement demonstrated through repeated measurements over comparable time periods?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There was evidence to support sustained improvement for the influenza vaccination indicator from baseline to remeasurement 5.	QAPI RE2SQ3 QIA II, III
Assessment Component 10 <input checked="" type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations 					

Key Findings for: <input type="checkbox"/> Proposal <input checked="" type="checkbox"/> Annual <input type="checkbox"/> Resubmission <input type="checkbox"/> Final	
1. Strengths	<ul style="list-style-type: none"> ➤ A quantitative and qualitative analysis was performed following the conclusion of each remeasurement period. ➤ CareNet has experienced a statistically significant improvement in the influenza vaccination rate from baseline.
2. Best Practices	None identified.
3. Potential /significant issues experienced by MCO (Barrier Analysis/Clarification Questions)	<p>Barriers identified included:</p> <ul style="list-style-type: none"> ➤ Enrollee and provider lack of awareness of benefits of consistent focus on chronic disease like asthma. ➤ Enrollee knowledge deficit regarding asthma. ➤ Lack of enrollee knowledge regarding need to have influenza vaccination.
4. Actions taken by MCO (Barrier Analysis/Response to Clarification Questions)	<p>Actions taken by the MCO included:</p> <ul style="list-style-type: none"> ➤ Educational articles were published in enrollee and provider newsletters. ➤ A Complex Asthma Case Manager targets identified high-risk enrollees with asthma. ➤ Educational packets on asthma were sent to all newly diagnosed enrollees with asthma. ➤ Providers are made aware of current asthma clinical guidelines in an annual mailing and through the MCO website. ➤ An influenza educational reminder was sent to all enrollees with asthma in the annual educational mailing and newsletter. <p>Providers were notified through the provider newsletter.</p>
5. Recommendations for the next submission (Pull from each Step Recommendations)	<ul style="list-style-type: none"> ➤ Describe more recent data analyzed to justify the choice of the topic and focus area. ➤ Submit a clear problem statement or study question that identifies why CareNet decided to focus on this project as a meaningful activity for the Medallion II population enrolled in 2004. ➤ Describe enrollment criteria to clearly define the indicators. ➤ Describe how CareNet ensures that their data collection approach validly captures all Medicaid enrollees for each of the indicators.

Key Findings for: <input type="checkbox"/> Proposal <input checked="" type="checkbox"/> Annual <input type="checkbox"/> Resubmission <input type="checkbox"/> Final	
<ul style="list-style-type: none"> ➤ Ensure that all data sources are accurately identified for each indicator. Describe the specific audit plan to ensure the collection of valid and reliable data for each indicator. Describe the degree of completeness of the automated data used for each study indicator. If manual data collection is performed for any indicator, describe how the data collection instrument was designed to promote inter-rater reliability. Develop a prospective data analysis plan that includes specific qualitative or quantitative data to be collected, use of population or sample data and basis for comparison, including not only baseline but prior period performance, current goal and benchmark, if applicable. Describe qualifications of staff/personnel used to collect the data. ➤ Considerable deterioration in rates for acute hospital admissions and emergency room visits from baseline suggests the need for improved barrier analysis and more aggressive, focused, and timely interventions. ➤ The quantitative analysis could be strengthened by comparing current rates with the prior period and baseline rates as well as established goal for each indicator. ➤ Through repeated measurements of the study indicators selected for the project, meaningful change in performance relative to the performance observed during baseline measurement must be demonstrated for all indicators. Deterioration in rates for acute hospital admissions and emergency room visits from baseline suggests the need for improved barrier analysis and more aggressive, focused, and timely interventions. Consider performing tests of statistical significance for each indicator for each measurement period as appropriate to determine if observed performance improvement is true improvement. 	
<input checked="" type="checkbox"/> The study design and methodology for this PIP submission meets PIP requirements. The EQRO recommends that the MCO continue with the project and report next year in the Spring of 2006 (exact time to be determined).	
<input type="checkbox"/> The study design and methodology for this PIP submission does not meet PIP requirements. To meet requirements, we recommend the MCO resubmit the following by _____ (date): <ul style="list-style-type: none"> • (Action) • (Action) 	

QUALITY IMPROVEMENT PROJECT VALIDATION WORKSHEET

Use this or a similar worksheet as a guide when validating MCO/PHP Quality Improvement Projects. Answer all questions for each activity. Refer to the protocol for detailed information on each area.

ID of evaluator jaaDate of evaluation: July 2005

Demographic Information	
MCO/PHP Name or ID:	Southern Health Services/CareNet
Project Leader Name:	Jennifer Palmese, Operations Manager
Telephone Number:	(804) 527-7040
Email:	jypalmese@cvty.com
Name of Quality Improvement Project:	Increasing Adolescent Immunization Rates- Medicaid
Dates in Study Period:	January 1, 2002 to December 31, 2004
Phase:	Remeasurement 4

I. ACTIVITY 1: ASSESS THE STUDY METHODOLOGY					
Step 1. REVIEW THE SELECTED STUDY TOPIC (S)					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
1.1 Was the topic selected through data collection and analysis of comprehensive aspects of enrollee needs, care and services?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Southern Health Services/CareNet (CareNet) has analyzed its Medallion II demographic and utilization data and compared performance on select measures with national data. The PIP notes that CareNet has a prevalence of children and adolescents in their population and that administration of immunizations has consistently ranked in the top 25 outpatient diagnostic categories. Administration rates for five adolescent immunizations were compared to HEDIS rates. According to this analysis CareNet did not meet the national Medicaid Quality Compass 50 th percentile benchmark for three out of five rates.	QAPI RE2Q1 QAPI RE2Q2,3,4 QIA S1A1
1.2 Did the MCO/PHP QIP address a broad spectrum of key aspects of enrollee care and services?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This PIP seeks to increase the adolescent rates for five specific immunizations. While this is considered to be a baseline review this PIP did address over time multiple care and delivery systems that have the ability to pose barriers to improved enrollee outcomes and meets the requirements of this component.	QAPI RE2Q1 QIA S1A2
1.3 Did the MCO/PHP QIP include all enrolled populations; i.e., did not exclude certain enrollees such as with those with special health care needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This PIP addresses care of all Medicaid HMO enrolled adolescents who turned 13 years old during the measurement and were continuously enrolled for twelve months immediately prior to their 13 th birthday. For all five indicators CareNet followed the HEDIS eligible population description for Medicaid.	QAPI RE2Q1 QIA S1A2

I. ACTIVITY 1: ASSESS THE STUDY METHODOLOGY
Step 1. REVIEW THE SELECTED STUDY TOPIC (S)
Assessment Component 1
<input checked="checked" type="checkbox"/> Met – All required components are present.
<input type="checkbox"/> Partially Met – Some, but not all components are present.
<input type="checkbox"/> Unmet -None of the required components is present.
Recommendations

Step 2: REVIEW THE STUDY QUESTION (S)					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
2.1 Was there a clear problem statement that described the rationale for the study?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CareNet identified a problem with adolescent immunization rates where three out of five reportable rates did not meet the national Medicaid Quality Compass 50 th percentile benchmark, which was considered to already be quite low. There was no data from relevant clinical literature to support the potential impact on the health status of the Medallion II population for rates below the national benchmark.	QIA S1A3
Assessment Component 2 <input type="checkbox"/> Met – All required components are present. <input checked="" type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations Develop a clear problem statement that not only analyzes performance relative to national benchmarks but also cites the potential health consequences identified in clinical literature for performance below benchmarks.					

Step 3: REVIEW SELECTED STUDY INDICATOR (S)					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
3.1 Did the study use objective, clearly defined, measurable indicators?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Five indicators were identified for this study: the percentage of enrolled adolescents who turned 13 years old during the measurement year, were continuously enrolled for 12 months immediately prior to their 13 th birthday, and who were identified as having had by the member's 13 th birthday for indicator #1 a second dose of MMR, for indicator #2 three Hepatitis B vaccines, for indicator #3 one Varicella (VZV) vaccine, for indicator #4 combo 1 and for indicator #5 combo 2. HEDIS measures were used for all five indicators. Numerators for three out of the five indicators, however, were stated incorrectly and did not support the identified indicator.	QAPI RE3Q1, QAPI RE3Q2-6 QAPI RE3Q7-8 QIA S1B2 QIA S1B3
3.2 Did the indicators measure changes in health status, functional status, or enrollee satisfaction, or processes of care with strong associations with improved outcomes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Increases in adolescent immunization rates have been identified as valid proxy measures for improved health status.	QAPI RE3Q9 QIA S1B1
Assessment Component 3 <input type="checkbox"/> Met – All required components are present. <input checked="" type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components are present.					

Step 3: REVIEW SELECTED STUDY INDICATOR (S)**Recommendations**

Ensure that numerators and denominators support all identified indicators.

Step 4: REVIEW THE IDENTIFIED STUDY POPULATION					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
4.1 Did the MCO/PHP clearly define all Medicaid enrollees to whom the study question(s) and indicator(s) are relevant?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CareNet clearly defined all Medicaid enrollees for each of the five indicators as all enrolled adolescents who turned 13 years old during the measurement year and who were continuously enrolled for 12 months immediately prior to their 13 th birthday	QAPI RE2Q1, QAPI RE3Q2-6
4.2 If the MCO/PHP studied the entire population, did its data collection approach capture all enrollees to whom the study question applied?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HEDIS methodology and specifications meet the requirements of this component.	QAPI RE4Q1&2 QAPI RE5Q1.2 QIA I B, C
Assessment Component 4 <input checked="" type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – One, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations 					

Step 5: REVIEW SAMPLING METHODS					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
5.1 Did the sampling technique consider and specify the true (or estimated) frequency of occurrence of the event, the confidence interval to be used, and the margin of error that will be acceptable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HEDIS methodology and specifications meet the requirements of this component.	QAPI RE5Q1.3a QIA S1C2
5.2 Did the MCO/PHP employ valid sampling techniques that protected against bias? <i>Specify the type of sampling or census used:</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HEDIS methodology and specifications meet the requirements of this component.	QAPI RE5Q1.3b-c QIA S1C2
5.3 Did the sample contain a sufficient number of enrollees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HEDIS methodology and specifications meet the requirements of this component.	QAPI RE5Q1.3b-c QIA S1C2
Assessment Component 5 <input checked="" type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations 					

Step 6: REVIEW DATA COLLECTION PROCEDURES					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
6.1 Did the study design clearly specify the data to be collected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Data to be collected was specified in the numerator and denominator for each of the five indicators. HEDIS has well defined data requirements for each indicator.	QAPI RE4Q1&2
6.2 Did the study design clearly specify the sources of data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HEDIS technical specifications meet the requirements of this component.	QAPI RE4Q1&2
6.3 Did the study design specify a systematic method of collecting valid and reliable data that represents the entire population to which the study's indicator(s) apply?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HEDIS methodology was used for collecting data for the five measures. There was no evidence of a plan to audit data to ensure validity and reliability for MY 2004 data.	QAPI RE4Q3a QAPI RE4Q3b QIA S1C1 QIA S1C3
6.4 Did the instruments for data collection provide for consistent, accurate data collection over the time periods studied?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There was no evidence to support clear data collection instruments designed to promote inter- rater reliability for any manual data collection.	QAPI RE4Q1&2 QAPI RE4Q3b QAPI RE7Q1&2
6.5 Did the study design prospectively specify a data analysis plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	There was no evidence of a prospective data analysis plan.	QAPI RE5Q1.2
6.6 Were qualified staff and personnel used to collect the data?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Qualifications of staff used to collect the data were not specified.	QAPI RE4Q4
Assessment Component 6 <input type="checkbox"/> Met – All required components are present. <input checked="" type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					

Step 6: REVIEW DATA COLLECTION PROCEDURES**Recommendations**

The PIP report should include a description of the internal plan to ensure the collection of valid and reliable data for each indicator. If manual data collection is performed for any indicator, describe how the data collection instrument was designed to promote inter-rater reliability. Describe a prospective data analysis plan for each indicator. Qualifications of staff/personnel used to collect the data should be specified for all indicators.

Step 7: ASSESS IMPROVEMENT STRATEGIES					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
7.1 Were reasonable interventions undertaken to address causes/barriers identified through data analysis and QI processes undertaken?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CareNet has consistently performed a barrier analysis following each remeasurement to identify opportunities for improvement and related interventions to increase the adolescent immunization rate for each indicator. Enrollee/family, provider, and administrative barriers were identified by the Southern Health Quality Improvement Department, which is comprised of registered nurses and a data analyst. Educational interventions targeted at parents/guardians and providers as well as outreach to parents/guardians and partnering with the Virginia Department of Health Immunization Registry for data sharing appear to be reasonable interventions based upon the barriers identified.	QAPI RE6Q1a QAPI RE6Q1b QAPI RE1SQ1-3 QIA S3.5 QIA S4.1 QIA S4.2 QIA S4.3
Assessment Component 7 <input checked="" type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations 					

Step 8: REVIEW DATA ANALYSIS AND INTERPRETATION OF STUDY RESULTS					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
8.1 Was an analysis of the findings performed according to the data analysis plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CareNet analyzed its findings after the 2004 remeasurement period. Both a quantitative and qualitative analysis was performed.	QAPI RE4Q4 QIA III
8.2 Did the MCO/PHP present numerical QIP results and findings accurately and clearly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The Data/Results Table accurately and clearly identified the rate and the comparison benchmark, which was established at the 50 th percentile from Quality Compass for each of the five indicators.	
8.3 Did the analysis identify: initial and repeat measurements, statistical significance, factors that influence comparability of initial and repeat measurements, and factors that threaten internal and external validity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is considered a baseline year for submission of this second PIP in compliance with a Department of Medical Assistance Services contractual requirement. Therefore, only 2004 measurements were reviewed.	QAPI RE7Q2 QIA S1C4 QIA S2.1
8.4 Did the analysis of study data include an interpretation of the extent to which its QIP was successful and follow-up activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is considered a baseline year for submission of this second PIP in compliance with a Department of Medical Assistance Services contractual requirement. Therefore, no analysis of the extent to which the PIP was successful and follow-up activities was required.	QIA S2.2
Assessment Component 8 <input checked="" type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					

Step 8: REVIEW DATA ANALYSIS AND INTERPRETATION OF STUDY RESULTS

Recommendations

Step 9: ASSESS WHETHER IMPROVEMENT IS REAL IMPROVEMENT					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
9.1 Was the same methodology as the baseline measurement used when measurement was repeated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is considered a baseline year for submission of this second PIP in compliance with a Department of Medical Assistance Services contractual requirement. Therefore, no repeat measurements will be reviewed during this cycle.	QAPI RE7Q2 QAPI 2SQ1-2 QIA S1C4 QIA S2.2 QIA S3.1 QIA S3.3 QIA S3.4
9.2 Was there any documented quantitative improvement in processes or outcomes of care?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is considered a baseline year for submission of this second PIP in compliance with a Department of Medical Assistance Services contractual requirement. Therefore, documented quantitative improvement in processes or outcomes of care was not reviewed during this cycle.	QAPI RE7Q3 QIA S2.3
9.3 Does the reported improvement in performance have face validity; i.e., does the improvement in performance appear to be the result of the planned quality improvement intervention?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is considered a baseline year for submission of this second PIP in compliance with a Department of Medical Assistance Services contractual requirement. Therefore, this component will not be reviewed during this cycle.	QIA S3.2
9.4 Is there any statistical evidence that any observed performance improvement is true improvement?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is considered a baseline year for submission of this second PIP in compliance with a Department of Medical Assistance Services contractual requirement. Therefore, this component will not be reviewed during this cycle.	QIA S2.3

Step 9: ASSESS WHETHER IMPROVEMENT IS REAL IMPROVEMENT
Assessment Component 9
<input checked="checked" type="checkbox"/> Met – All required components are present.
<input type="checkbox"/> Partially Met – Some, but not all components are present.
<input type="checkbox"/> Unmet -None of the required components is present.
Recommendations

Step 10: ASSESS SUSTAINED IMPROVEMENT					
Component/Standard	Y	N	N/A	Comments	Cites and Similar References
10.1 Was sustained improvement demonstrated through repeated measurements over comparable time periods?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	This is considered a baseline year for submission of this second PIP in compliance with a Department of Medical Assistance Services contractual requirement. Therefore, this component will not be reviewed during this cycle.	QAPI RE2SQ3 QIA II, III
Assessment Component 10 <input checked="" type="checkbox"/> Met – All required components are present. <input type="checkbox"/> Partially Met – Some, but not all components are present. <input type="checkbox"/> Unmet -None of the required components is present.					
Recommendations 					

Key Findings for: <input type="checkbox"/> Proposal <input checked="" type="checkbox"/> Annual <input type="checkbox"/> Resubmission <input type="checkbox"/> Final	
1. Strengths	<ul style="list-style-type: none"> ➤ CareNet used use objective, clearly defined, measurable indicators based upon HEDIS specifications. ➤ A comprehensive quantitative and qualitative analysis was performed following each measurement period. ➤ Focused interventions were developed in response to identified barriers and opportunities for improvement. ➤ Remeasurement 4 results increased over the baseline results for all five measures. Four of the five measures increased over remeasurement 3 results.
2. Best Practices	None identified.
3. Potential /significant issues experienced by MCO (Barrier Analysis/Clarification Questions)	<p>Barriers identified included:</p> <ul style="list-style-type: none"> ➤ Inadequate enrollee knowledge. ➤ Inadequate practitioner knowledge. ➤ Inadequate capture of adolescent immunization rates.
4. Actions taken by MCO (Barrier Analysis/Response to Clarification Questions)	<p>Actions taken by the MCO included:</p> <ul style="list-style-type: none"> ➤ Monthly parent/guardian and physician reminder letters sent. ➤ Provided educational information and/or materials relating to adolescent immunizations to PCP offices. ➤ CareNet and Coventry began working with Virginia Department of Health/Immunization Registry to share data. ➤ Preventive Health Guidelines mailed to enrollees. ➤ Educational articles published in enrollee and provider newsletters.
5. Recommendations for the next submission (Pull from each Step Recommendations)	<ul style="list-style-type: none"> ➤ Develop a clear problem statement that not only analyzes performance relative to national benchmarks but also cites the potential health consequences identified in clinical literature for performance below benchmarks. ➤ Ensure that numerators and denominators support all identified indicators.

Key Findings for: <input type="checkbox"/> Proposal <input checked="" type="checkbox"/> Annual <input type="checkbox"/> Resubmission <input type="checkbox"/> Final	
➤	The PIP report should include a description of the internal plan to ensure the collection of valid and reliable data for each indicator. If manual data collection is performed for any indicator, describe how the data collection instrument was designed to promote inter-rater reliability. Describe a prospective data analysis plan for each indicator. Qualifications of staff/personnel used to collect the data should be specified for all indicators.
<input checked="" type="checkbox"/>	The study design and methodology for this PIP submission meets PIP requirements. The EQRO recommends that the MCO continue with the project and report next year in the Spring of 2006 (exact time to be determined).
<input type="checkbox"/>	The study design and methodology for this PIP submission does not meet PIP requirements. To meet requirements, we recommend the MCO resubmit the following by _____ (date): <ul style="list-style-type: none">• (Action)• (Action)